

May 18, 2007

Gregory J. Thorpe, Ph.D.
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North Carolina Department of Transportation
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Raleigh, North Carolina 27699-1548

Subject: US 64 Improvements-Asheboro (Zoo Connector) Randolph County
Final EIS; TIP R-2536
CEQ No.: 20070148; FHW-E40796-NC

Dear Dr. Thorpe:

The U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the subject document and is commenting in accordance with Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA). The North Carolina Department of Transportation (NCDOT) and the Federal Highway Administration (FHWA) are proposing to make improvements to US 64 Asheboro Bypass in Randolph County. The proposed 14-miles of new roadway improvements will address future congestion in Asheboro along the US 64 corridor as well as provide improved access to the North Carolina Zoological Park. This project has been in the NEPA/Section 404 Merger process and EPA has been actively involved during project planning.

Many of EPA's comments and environmental concerns on the November 2002 Draft Environmental Impact Statement (EIS) have been addressed during the Merger process meetings and in the FEIS (Pages 29 to 34). EPA's primary concerns regarding noise and visual impacts, stream and wetland impacts, and potential indirect and cumulative impacts have been largely addressed. EPA recommended Alternatives 1 or 13 (LO-Lack of Objections) in its November 25, 2002, letter on the DEIS. Based upon input from other agencies during the Merger process and subsequent commitments to minimize impacts to streams and wetlands through bridging, EPA concurred on Alternative 29 as the Least Environmental Damaging Practicable Alternative (LEDPA) on May 12, 2004. Alternative 29 (Preferred) includes 145 residential relocations, 14 business relocations, 1 impacted church, 135 noise receptor impacts, approximately 642.2 acres of terrestrial forest impact, 4.1 acres of wetland impacts and approximately 23,292 linear feet of U.S. Army Corps of Engineers (USACE) mitigable stream impacts. EPA notes that potential impacts from relocations (i.e, From 160 to 145 residential and 24 to 14 business relocations) have been substantially reduced by NCDOT and FHWA since the issuance of the DEIS.

EPA continues to have some concerns in regard to avoidance and minimization efforts and identified environmental commitments (Special Project Commitments/Green

sheets; pages 1 to 3). The Merger team agencies have agreed to minimal bridge lengths of 165 feet at Little River, Vestal Creek, and North Prong Richland Creek. We recommend that these minimum bridge length commitments should be identified specifically in the project commitments. Furthermore, it is unclear if Table S.1, page xv, has been changed to reflect these minimization efforts. Stream impacts including both USACE and N.C. Division of Water Quality (DWQ) mitigable have not been broken out in Table S.1 as was done in the DEIS. This should be identified in the ROD.

EPA's remaining environmental concerns and our specific comments are attached to this letter (See Attachment A).

In summary, although many of our environmental concerns have addressed, we continue to have some remaining concerns, as indicated in above and in the attached specific comments, that we recommend be addressed in the ROD and the ongoing Merger process. EPA will continue its Merger involvement for this project through the hydraulic and permit review stages, including the detailed avoidance and minimization efforts for stormwater management and the use of Best Management Practices (BMPs). Should you have any questions about EPA's comments, please contact Mr. Christopher Militscher on my staff at (919) 856-4206 or by e-mail at: militscher.chris@epa.gov.

Sincerely,

Heinz J. Mueller
Chief, NEPA Program Office

Attachment – Attachment A

Cc: K. Jolly, USACE Wilmington District
J. Sullivan, FHWA-NC P. Benjamin, USFWS-Raleigh
J. Hennessy, NCDENR-DWQ

ATTACHMENT A
US 64 Improvements- Asheboro Bypass/Zoo Connector, Randolph County
TIP# R-2536

Specific Comments on FEIS

Proposed Interchanges at NC 159 and NC 42

EPA acknowledges the additional traffic projections and forecasts regarding Annual Average Daily Traffic (AADTs) for NC 159 and NC 42 provided in the FEIS on pages 30 and 31. EPA does not disagree with this overall assessment. However, EPA recognizes the proposed interchange design at NC 42 that includes an expanded diamond configuration (Figure 1.2j Appendix E, FEIS). EPA requests that NCDOT and FHWA further explore avoidance and minimization design efforts for this proposed interchange, including compressed 'clover-leaves' or 'diamonds' or a Single Point Urban Interchanges (SPUI). EPA further acknowledges the design efforts that were made for the proposed interchange at NC 159 (Figure 1.2g, Appendix E, FEIS). This 'half-diamond or half-clover' design does appear to minimize impacts to the human environment and the unnamed tributary (UT) #08 to Tantraugh Branch. NCDOT estimates potential 'ramp' impacts at NC 159 including 2 additional residential relocations and 250 linear feet of stream impact and at NC 42 including 6 additional residential relocations and 400 linear feet of stream impact.

Additional Avoidance and Minimization Measures for Streams and Wetlands

EPA notes the NCDOT comments regarding the quality of the system at Tantraugh Branch on page 33 of the FEIS. Following the field review meeting in May of 2004, EPA concurred with other agencies regarding the low/medium quality of the forested wetland near Tantraugh Branch. However, EPA notes that the avoidance and minimization efforts signed by Merger team members include a commitment that fill slopes be held to 2:1 at streams and wetlands along the mainline and at grade separations. This environmental commitment does not appear in the "Green sheets" of the FEIS nor does it appear to be represented on the Environmental Features Maps (the light green 'fill' lines within the red right-of-way lines).

EPA requests that the minimum bridge lengths of 165 feet for Little River, Vestal Creek and North Prong Richland Creek be included in the Record of Decision (ROD) environmental commitments.

EPA requests that NCDOT and FHWA further consider the proposed interchange design at NC 49. Recognizing the NC 49 interchange 're-design' efforts identified in Appendix B of the FEIS on Concurrence Point 4A, Avoidance and Minimization measures form, EPA estimates the 'free-flowing' interchange at NC 49 appears to be approximately 1,800' x 1,800' in size or approximately 74.3 acres (right-of-way limits to right-of-way limits). This interchange has multiple impacts sites to both Taylors Creek and an UT to Taylors Creek. Unlike the 'free-flowing' design needed for the interchange

with US 220, NC 49 is a two-lane rural connector with a reduced speed limit. EPA is unclear on how specifically the interchange design was modified to minimize impacts to Taylors Creek and the UT to Taylors Creek (See Figure 1.2c, Appendix E of the FEIS or Figure C, Environmental Features Map provided May 25, 2006).

EPA made a general comparison of stream impacts per mile of new location highway between this proposed project and other new location projects. The BASELINE stream impact for new location projects is approximately 473 linear feet per mile for eastern N.C. and 907 linear feet per mile for western N.C. The proposed US 64-Asheboro Bypass is near the 'dividing line' for EPA's impact analysis. Using the more conservative comparison to the western average of 907 linear feet per mile, the proposed project has USACE mitigable stream impacts of 1,663.7 linear feet per mile. This average impact represents an approximate 54.5% increase in stream impacts for similar 4-lane divided highways in western N.C. EPA believes that a great deal of the additional impact is from the preliminary design of the interchanges proposed at NC 49 and NC 42, as well as the interchanges west and east of Asheboro, at US 220, at NC 159, and for the Zoo Parkway connectors.

Stream and Wetland Mitigation

EPA acknowledges the environmental commitment regarding the development of a mitigation plan for jurisdictional impacts to streams and wetlands and that this plan will be developed during the Section 404 and Section 401 permit application processes. NCDOT also proposes to evaluate opportunities for on-site mitigation and has indicated that mitigation for all remaining jurisdictional stream and wetland impacts will be through the Ecosystem Enhancement Program (EEP). From EPA's knowledge of the project study area, there appears to be substantial opportunities for on-site stream mitigation in Randolph County due to past agricultural activities. Please also contact Ms. Kathy Matthews, EPA Wetlands Program, for any on-site mitigation field reviews.

Noise Abatement

The FEIS addresses a proposed noise wall at the residential area along Twelve Tree Drive adjacent to US 220. The noise wall is expected to benefit 12 receptors. EPA found that the noise impact information is different between page XIII of the FEIS and the summary impact table. Page XIII describes 36 impacted residences and 2 businesses. This is far fewer than what is cited in Table S.1, Page XV. EPA requests that this information be clarified. EPA also requests that NCDOT and FHWA perform a final analysis of noise abatement measures following the completion of the final roadway plans and the design public hearing as identified in the project environmental commitments. Impacted noise receptors for this project are substantial (i.e., 135 total receptors per Table S.1) and consideration for all reasonable noise abatement measures should be considered during the final design for the proposed bypass.

Indirect and Cumulative Impacts

EPA has reviewed the information on indirect and cumulative impacts summary as provided on Pages 13-14 of the FEIS. EPA notes, “that cumulative effects to natural resources at not anticipated to be substantial, as the project will not change the rate of development in the Asheboro area, except at the interchanges”. One of EPA’s remaining environmental concerns regarding this Strategic Highway Corridor (SHC) project is the number and type of some of the interchanges proposed by NCDOT and FHWA. NCDOT and FHWA are predicting accelerated cumulative effects to natural resources where urban/commercial development is planned at these interchanges. EPA notes that major drainage systems are located near almost every interchange (US 64 west of Asheboro and Cable Creek and tributaries; NC 49 and Taylors Creek and tributaries; US 220 and Little River tributaries, NC 159 and Tantraugh Branch and tributaries; Zoo Parkway and South Prong Richland Creek; NC 42 and Squirrel Creek tributaries; and US 64 east of Asheboro and Gabriel’s Creek). NCDOT and FHWA have made a strong case for supporting these interchanges based upon future traffic projections on some of the local roadways. However, with the exception of the termini interchanges and the US 220 interchange, EPA believes that strong consideration should be given to minimizing the direct impact to streams and wetlands as well as other natural resources at these locations and discourage indirect and cumulative impacts from accelerated urban/commercial development at these locations.

Terrestrial Forest Impacts/Air Quality

EPA notes that terrestrial forest impacts are significant for a 14-mile project (i.e., 561.8 acres of deciduous forest, 31.4 acres of evergreen forest and 49.0 acres mixed forest: 642.2 acres total). Compared to the BASELINE average per mile for other N.C. western new location projects of 26.8 acres/mile, this project will impact 45.8 acres/mile of terrestrial forests. EPA is concerned for the loss of almost a square mile of terrestrial forest habitat in an area that is designated as moderate non-attainment for Ozone under the 8-hour Ozone standard. Furthermore, EPA is concerned for the short-term but potentially very severe impacts from burning vegetative debris from clearing and grubbing (Referencing page XVI of the FEIS). EPA requests that FHWA and NCDOT seriously explore alternative means of vegetative debris ‘disposal’ including chipping and recycling or composting.

Mobile Source Air Toxics (MSATs)

EPA acknowledges that the FEIS addresses MSATs in the form of FHWA’s Interim Guidance (Pages 15-20). EPA has previously provided NCDOT and FHWA with detailed comments on other projects concerning this type of qualitative assessment that is being inserted into various NEPA documents. For the US 64 Asheboro Bypass/Zoo Connector, EPA does not believe that future emissions of MSATs resulting from this proposed project will, by themselves, have a significant impact on human health and the environment.